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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,699	11/27/2001	Kyung Pa Min	0465-0803P-SP	8385
2292	7590	02/08/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PATHAK, SUDHANSHU C	
			ART UNIT	PAPER NUMBER
			2634	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/993,699	Applicant(s) MIN, KYUNG PA	
	Examiner Sudhanshu C. Pathak	Art Unit 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on November 27th, 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 11 is/are rejected.
- 7) ☒ Claim(s) 12-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on November 27th, 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-to-19 are pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant Admitted Prior Art (AAPA) in view of Dokic et al. (5,699,392).

Regarding to Claim 11, the Applicant Admitted Prior Art (AAPA) discloses an apparatus for generating a decoder clock signal (Fig. 1 & Fig. 2) comprising a detector detecting a plurality of program clock reference (PCR) values encoded by an encoder clocked using an encoder clock signal (Specification, Page 2, lines 11-22 & Specification, Page 3, lines 1-2, 6-13 & Specification, Page 4, lines 1-8); a processor generating a first/second initial difference value by calculating a difference between a first/second detected PCR value and a system time clock (STC) value generated when the first/second PCR value was detected (Fig. 2, elements 22, 23, 27 & Specification, Page 4, lines 3-22); an oscillator generating a decoder clock signal (Fig. 2, element 26 & Specification, Page 4, lines 3-22); and a counter generating the system time clock values based on the decoder clock signal (Fig. 2, element 21 & Specification, Page 4, lines 3-22). However, the AAPA does not disclose the processor generating a composite difference value by calculating a


difference between the first initial difference value and the second initial difference value.

Dokic discloses a method and apparatus (a clock recovery system) for maintaining the frequency of a decoder clock at the same frequency as the encoder clock based on the program clock reference (PCR) values contained in the digital data stream (Abstract, lines 1-4). Dokic discloses subtracting the extracted PCR value from the system time clock (STC) to produce an error signal (Abstract, lines 6-24 & Column 2, lines 35-50). Dokic also discloses computing the rate of change in the PCR and the STC values (derivatives of the difference between the STC and PCR) so as to determine if the decoder is synchronized to the encoder (Column 2, lines 51-67 & Column 8, lines 59-67 & Column 9, lines 1-8, 30-65 & Fig. 6A, element 114 & Fig. 6B, element 118). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that Dokic teaches generating a composite difference value by calculating a difference between the first initial difference value and the second initial difference value and this can be implemented in the apparatus for generating the decoder clock as described in the AAPA so as to synchronize the decoder clock also from the phase information and further develop a clock recovery system that does not require expensive parts or complex hardware design.

Allowable Subject Matter

3. Claims 1-10 are allowable over the prior art of record.
4. Claims 12-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.
 - If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571)-272-3056
 - The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
 - Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sudhanshu C. Pathak


STEPHEN CHIN
SUPERVISORY PATENT EXAMINER
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